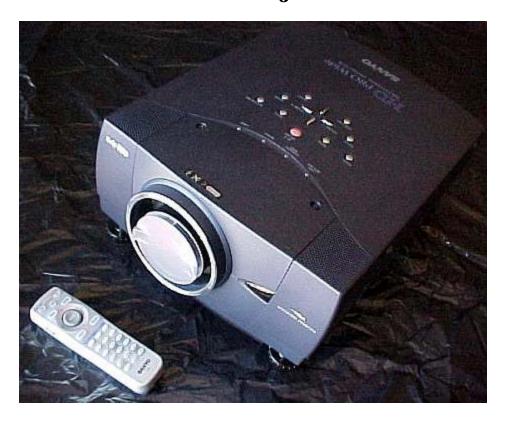
## The BIG Picture Review:

The BIG Picture

Sponsored in part by:

## Sanyo PLV-70 Multimedia LCD Video Projector

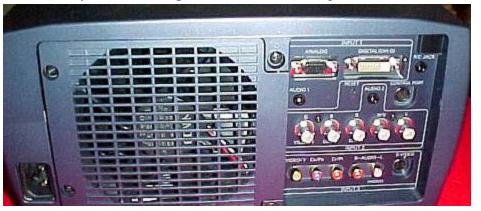


Reviewed by **Jeff McNeal** 

Sanyo's Leaner, Meaner, and improved Scaler Slayer

Wrapping up three delightful weeks with the new Sanyo PLV-70 is a bittersweet experience. The longer it took me to write the review, the more time I could spend with this smart successor to the very popular PLV-60, which really impressed us.

There are only two PLV-70 production units floating around the U.S. as I write this, and we're



grateful to have been allowed to spend so much time with one of them. As comparisons between the PLV-70 and its predecessor are inevitable, let's start with what's

## changed between the two models.

The most exciting aspect of these changes are that they are all for the better, many of them corrections of attributes that we found less desirable in the PLV-60. This should be regarded as excellent news for those familiar with the PLV-60 and who like it.

The width of the new case is about the same as the PLV-60, but the length on the PLV-70 has been shortened by about two inches. The lens is now offset slightly to one side, rather than being placed square in the middle. Gone is

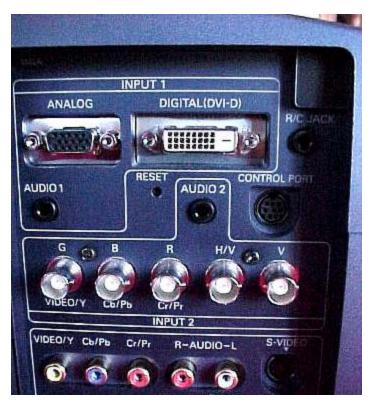
the hard power switch. If the PLV-70 is plugged in, it's on standby.

Gone too are one of the filters, bringing the total to just two, which have been relocated to the side of the unit near the integrated carrying handle, which folds down when not in use. You access the filters along the bottom, where a small opening and a ridge along the bottom edge of the filter allow you to catch it with your fingernail or perhaps the edge of an ATM card or what have you.

It would seem to me that the filters might have been better placed on the opposite side of the case from the handle to thwart the gravitational properties of dust, a theory that might bear some fruit as it is my



understanding that both of the production units have been returned to Sanyo to remove dust and in my case -- a stray fiber of some sort -- that has made it's way into the optical assembly.



I must give kudos to Sanyo's support, however. They paid for Airborne to pick up the projector on their account, took care of the problem and sent the unit back to me the same day they received it. I sent it on a Tuesday and got it back on Thursday. Of course, dust ingress has been the bane of LCD projectors of all makes since the dawn of the technology, and if my review unit was any indication, there is still room for improvement. But relax, that's about the *only* troublesome news I have to report...

The other main complaint about LCD projectos, with a few exceptions, is the visibility of the pixel structure. While this hasn't posed a great problem for most owners of the PLV-60, Sanyo chose to incorproate their Micro Lens Array technology to the PLV-70, rendering pixel structure as an insignificant issue. Oh sure, if you strain hard enough from your normal seating position, you can *still* see the structure on occasion, but I dare say that you can probably see it on your computer monitor as well. For some reason, home theater fans are much more

on their PC's. And which do you spend the most time in front of? Go figure.

The case, aside from being reduced in length and reconfigured (the connectors are now all on the back side), has gained a special data port on the side and is now a handsome midnight blue color, which might be easily mistaken for black until closer examination.

The PLV-60 was downright sexy in it's silver metallic case, but the PLV-70 disappears into typical home decor a lot easier -- something that your better half will probably appreciate. Few decorators want to arrange their room furniture and accessories around a projector. Also missing from the line-up is the annoying two-stage fan from the earliest PLV-60 units, which couldn't help but distract when it would ramp up to a higher speed while you're watching a movie. Fine for a classroom or the boardroom, but unacceptable for maximum home theater enjoyment. The fan is now larger for better efficiency, and quieter. In fact, I could barely notice it at all during the quietest passages in a movie. Your home PC fan is probably no quieter. At just over 17 lbs, the PLV-70 is a few pounds

lighter than its predecessor, too.

Another significant change not noticeable is the switch from Sony to Epson TFT active matrix LCD panels. They're still 1366 x 768 dots as they are on the PLV-70, but the MLA not only reduces the perceived pixel size, it also better concentrates the light output, allowing the 200 watt bulb to reach an amazing peak of around 2000 ANSI lumens, which is the brightest projector I've had the pleasure of reviewing yet.

I'm beginning to think of light output in the same terms as I do audio amplifiers. All that wattage may not be necessary, but it's nice to have in reserve when you need it. And somehow, the extra output not only gives you more flexibility but also a cleaner signal to enjoy. It's the difference between huffing and puffing when you're close to the limit versus cruising down the highway in overdrive.



This leads me to the ambient light issue that troubles so many people who would otherwise love to leap into a front projection system. The PLV-70 handled ambient light in a very impressive manner even under the harshest of conditions. I took a series of digital photos that will describe the various ambient to full on lighting scenarios.

The most important fact to consider while viewing these images are that they do not accurately reflect how bright the interior of the theater room really is. The reflected light from the projector and/or the outside windows is so bright, that the camera compensates by reducing the exposure and creating the impression of a dimly lit scene, that is really anything but. Just remember that everything in the image is *relative* in terms of the contrast between lit objects, including the image on the Stewart Grayhawk screen, which is what we tested this projector with.



Taken at night, note the comparison between the projected image and the 20" direct view monitor right next to it. The camera senses that the direct view is still brighter, however, in real life, the difference is barely discernable.



The light fixture in the middle of the room contains two 75-watt light bulbs and light up the room enough to read. Note the different images from the same film, simultaneously feeding both devices. This is a one in a million shot that shows the signal is reaching either the projector or the television at a VERY slightly different rate of speed. I wouldn't be able to duplicate a shot like this. Pretty amazing...



Now again, it's difficult to tell because the camera's iris is practically closed, but the entire room is now flooded with light via nine (that's right, 12) halogen floodlights that total about 600 watts. They are turned on fully, and two of them are trained directly on the screen. Draw your own conclusions here... Frankly, I think this is *very* impressive. This my friends, is the acid test.



Another angle, but the lighting is the same. Full on, and easily more than enough to read by, yet the screen, even though part of it is washed out by the lighting, is still quite visible. I should note that I do have black masking panels on our Stewart screen that are currently in the lowered position for this 4:3 film.



Above is a shot that was taken during the afternoon, with our Western-facing sliding door wood blinds wide open, flooding the room with sunlight, though it was not yet shining into the room itself. But what if we open the blinds closest to the screen? What then? Let's find out...



Imminently watchable, folks. Even with all the blinds in the entire room fully opened. Let's close the blinds, which are by no means impervious to ambient light leak through, and keep watching the scene...



Sanyo has also answered the call for a longer throw distance with a lens that is indeed longer than the PLV-60, but not quite as long as the Sony VPL-W400Q, which a great number of people built their home theaters around a few

years ago. The throw is rated at 5.0' to 51.3'. According to the chart in the manual, you can have a screen size anywhere from 115" to 150" at 19.1' out.

I was anxious to see if the PLV-70 would occupy the same space behind the rear wall of my theater, but no such luck. The offset lens and taller case than my old projector prohibited me from the test without major structural modifications to my wall enclosure, which I would most certainly be willing to perform if I were purchasing this projector.

Regardless, the whisper quiet fan removes much of the motivation for placing the projector behind a wall to begin with. I'd even go so far as to say that I can't imagine anyone wanting to build or buy a sound enclosure for this projector. There is simply no need to.

Sanyo also heeded the call for a back-lit remote control. Well, a *partially* back-lit controller, at least, which in practice, ain't much better than one which isn't lit at all.

The most significant change in the electronics, other than the inclusion of the Micro Lens Array, the increased contrast ratio and higher brightness (neither spec appears in the manual), is the new color management system, which allows you to adjust the level, phase and gamma for selected areas of the screen which you choose, allowing you to replace the colors with others if you wish.

Frankly, this feature intimidated the heck out of me and I really didn't want to mess with it. But the idea here, is to compensate for changes in color fidelity as the bulb ages. At least, that is my understanding. You select the "target" area of the screen you wish to manage the color on, then choose your colors from a palette. I'm sure that there are those among you who will relish this feature and make great use of it, but this is one bell (or is it a whistle?) that I wasn't anxious to mess with, for fear of messing up my settings that I worked so hard on. Like the PLV-60, there are four



user memory settings, for storing your personal image parameters.

The "standard" and "real" picture settings in the computer mode were the same to my eyes, just as the "standard" and "cinema" settings appeared in video mode. Neither setting in its respective mode is particuarly appealing. Colors are washed out and bland. However, I was able to achieve exactly the picture I wanted in various lighting conditions and saved them in the other memory settings.

The PLV-70 retains all the consumer-friendly goodies from its predecessor, including a wide array of user adjustments, motorized lens shift, keystone correction, adjustable front feet and a built-in scaler that marks a significant improvement over the PLV-60. So much so, that I wound up disconnecting the Quadscan Pro Elite that I've been using for some time now, and just fed a straight component signal directly to the projector, setting the projector to "progressive" scan. The PLV-70 smoothly converted the interlaced signal from my Sony DVP-S7000 DVD player, yielding outstanding results. Our five globe titles look positively stunning on this unit.

Black level is satisfying and the uniformity, like the PLV-60 before it, is excellent. For its' price, the PLV-70 is going to be awfully hard to beat. But FYI, I understand that the manufacturers are all scrambling to come up with a \$1,000 video projector that won't come close to this one for features and quality, but will certainly help those who can only dream of home theater to jump into the game with relative ease. Look for these machines to start appearing before too long.

So, *would* I personally buy this projector? Not at the present time, because I'm still quite pleased with my Sanyo PLV-60 clone (Studio Experience HD-13) and the Quadscan Elite scaler, which improves the picture to levels nearly as close as the PLV-70, albeit nice as bright.

At least my present performance is close enough to where I don't perceive enough of a significant gain to jump ship -- yet. But if I were upgrading from just about any other projector or buying a projector for the first time (and wanting it to be my last time for a good long while), this decision would be a nobrainer.



If you have more questions and would enjoy further objective discussion about the Sanyo PLV-70, enter our <u>Sanyo Projector forum</u> here at TheBIGPictureDVD.com and let's talk about it!

## RETURN TO THE NEWS

Search:	All Products	,
Keywords:	(GO)	

Any purchase via this searchbox supports this website.